CONCORDIA UNIVERSITY

Graduate Studies News

Published by: *The Division of Graduate Studies*
Mailing Address: *1455 de Maisonneuve Blvd. West Montreal, Quebec H3G 1M8*
Location: *2145 Mackay St.*
Telephone: *(514) 848-3800*

Vol. 4, No. 3, April/May, 1989

From the Dean's Desk
Concordia's Graduate Programs: The Appraisal Process
Luc Varin – SIP/Ph.D. Candidate in Biology
New Concordia/MasterCard services

From the Dean's Desk

What is a Thesis?

As the Regulations Committee of the Division of Graduate Studies examines all aspects of thesis examinations, questions surface to which all academics have a definite, but not always consonant, answer.

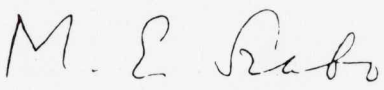
It is universally agreed that a doctoral thesis must contain new knowledge. When the University of Chicago attempted a few years ago to introduce a special doctoral program in mathematics in which theses were intended to make existing knowledge more accessible, the program failed because its graduates had a difficult time finding academic employment without having proved "new theorems".

To my surprise, it appears to be less universally accepted that this new knowledge need not be in virgin form. I have always encouraged my students to publish their results in refereed journals and present them at scientific meetings as soon as possible, usually prior to the inclusion of their results in their doctoral theses. In fact, the first "prix d'excellence" des grands montréalais awarded in 1988 consisted in large measure of a compendium of scientific publications, written both in English and French.

As Dean I was recently called upon to rule on the acceptability of this practice. The question is whether a thesis must be more than simply a compilation of previously published material. I am a firm believer in peer judgment and feel that it is important for all of our graduate students and professors to follow the practice of submitting research results to learned journals at any time. Part of graduate training is the introduction of our students to their profession and professional practices. I admit, however, that there is another grey zone that must be debated and clarified in the case where the students' publications are joint with fellow students and supervisors. These papers are usually presented as the result of "team work" and individual contributions are rarely identified. The inclusion of such publications in a thesis can only be accepted after the authors of the paper have collectively confirmed in writing to the examining committee that the pertinent parts of paper are the sole contribution of the author of the thesis.

Every thesis committee must of course struggle with its own definition of "new knowledge". Over the years I have learned that both the concept of knowledge and more particularly that of new knowledge have many variations according to the disciplines involved. I have come across a case in mathematics where the genuine new knowledge that had been sought was considered too insignificant to warrant a doctoral degree. The student was therefore denied the degree. The person who really failed in this case was obviously the thesis supervisor who had assigned the thesis topic to the student. What made the case worse was the fact that mathematicians had tried for quite some time to solve this problem, but had failed to discover its "easy solution".

Over the next few months the regulations committee will continue its study of these problems and will develop workable and judicious guidelines for doctoral thesis committees based on these reflections.



M. E. Szabo

Concordia's Graduate Programs

The Appraisal Process

"It is in the interest of any school or organization to have an effective scheme for evaluation of its programs," according to Dr. V.V. Baba, Associate Dean of Graduate Studies, who is responsible for organizing and implementing a systematic appraisal system of Concordia's graduate programs. Operating in accordance with the premise that there is no such thing as a perfect program and that there is always room for improvement, all graduate programs (doctoral, master's and diploma) are appraised every six years. The six-year interval allows sufficient time for changes to be implemented and adjustments to new circumstances to be made. Three years after an appraisal, each department must submit an interim report on the Appraisal Board's suggestions and/or recommendations.

When a specific graduate program is up for review, Dr. Baba asks the program's director and chair to provide information on the program, students, courses, objectives, faculty, research, students' financial needs, physical resources, faculty resources, and any other relevant areas. Other involved parties, such as the the University Research Director and subject librarian responsible for the library needs of that program, are also asked to submit standing reports about their own areas.

Other factors to be considered include the balance between a program's objectives and its curriculum, the relationship between its master's and doctoral programs, enrolment figures, admission requirements, attracting quality students, student morale, cross-listing of courses, and the fit between workload per course and credit obtained.

The Board of Graduate Studies is a legislative body composed of academics, administrators, and graduate student representatives. A committee of approximately eight people is formed for each program review, and is chaired by a member of the Board. Committee members are drawn from faculty within the university who are familiar with graduate studies, but outside the specific program under review. "They are usually quite new as to the subject matter but quite well informed about graduate education," says Dr. Baba, "so they can see the forest and not get buried in the trees." Included on each committee is one graduate student (also from another department), along with Dr. Baba, representing the Dean of Graduate Studies.

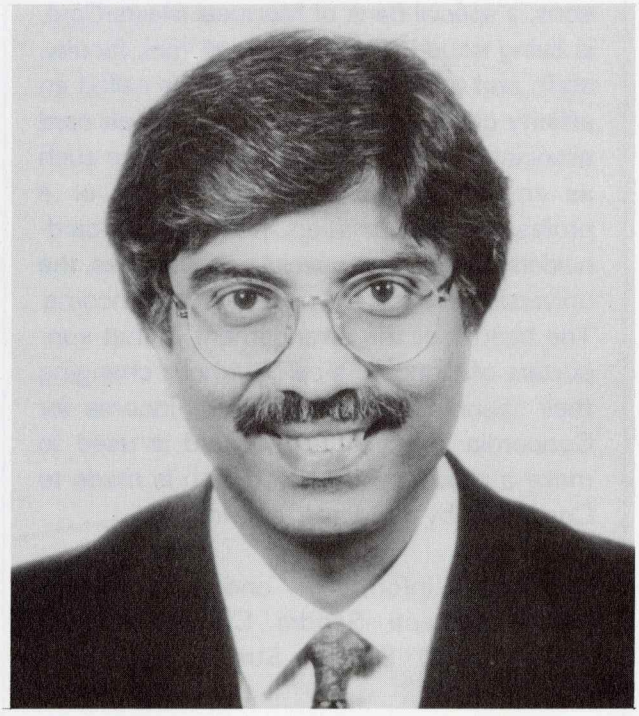
The review process lasts for the duration of one academic year, with each committee meeting on a monthly basis. This year, there are six review committees.

The committee receives a full set of dossiers on the program and systematically surveys every student in that program on a number of issues — "anything and everything that may directly or indirectly contribute to a graduate student's education," says Dr. Baba. They also look at the previous appraisal and the response on the report by the department.

The committee brings in an external appraiser — an expert in the specific discipline being appraised from outside the university. The appraisals committee asks the department chair to recommend several eminent experts in the field, and the committee selects one from that list to act as the external appraiser. After reviewing the documentation on the program, the appraiser spends a two-day on-site visit speaking to students, professors,

and support staff, as well as visiting the department's facilities, and then submits to the committee a written report on the strengths and weaknesses of the program, as well as any recommendations.

Based on its own research, the external appraiser's report, and interviews with the graduate program director and department chair, the committee compiles its own package of observations, evaluations and suggested changes. The committee's report is sent first to the Dean of Graduate Studies, and then to the Steering Committee of the Board of Graduate Studies, which approves it in form, and forwards it to the Board of Graduate Studies. Copies of the report are sent to the program's graduate program director and chair for their response. This response is formulated over the summer, and then submitted to the Board for discussion with the chair of the appraisal committee. The resource committee then estimates the financial costs of implementing these changes, and these figures are sent to the university planning and priorities committee.



Dr. Baba plays a major role in the appraisal process — from initially choosing the committee members to processing the final report.

The committee's suggestions fall under two head ings — "modifications" and "recommendations". The department is obliged to comply with any modifications requested within a given time frame; recommendations are open to debate. If a department disputes the validity or relevance of the committee's proposed recommendations, the Board of Graduate Studies acts as mediator — and either negotiates a compromise or turns the recommendations into (mandatory) modifications. To date, the Board has never had to impose changes on an unwilling department.

Dr. Baba says that the interim progress reports, done at three-year intervals for each graduate program, sometimes show that the recommendations and modifications have not been implemented, most often because of budgetary constraints. When this happens, the Board puts into place a method of tighter supervision, setting down a more rigid schedule of changes and requests annual or semi-annual reports.

The appraisal procedure has been in place since the 1960s and has been systematized for the last ten years. "The hope is that by the end of the appraisal, the program and the university will benefit," concludes Dr. Baba. "In my opinion, the appraisal system is the cornerstone of graduate studies."

LUC VARIN: Life Through a Lens From Cinematographer to Biologist

In 1984, Luc Varin left the hectic life of cinematographer and filmmaker at Radio Canada to set sail with 3 friends aboard a 35-foot boat. They travelled from Halifax to the Azores and then on to Lisbon, battling the Atlantic and her whims. The experience led him to rethink his lot in life: he was ready for a career change.

Today, Luc Varin is pursuing a doctoral degree in Biology as a SIP (specialized individual program) student. The Department of Biology does not presently offer a Ph.D. program, but through Concordia's unique special individualized program, a mutually beneficial academic setting can be designed to attract graduate students of Luc Varin's calibre.

Varin was admitted directly into the doctoral program based on the merit of his scholarship and academic performance in a Special Study on plant biochemistry and biotechnology, completed in his final undergraduate year. The study looked at the biosynthesis of a certain class of molecules in a plant from Argentina. The work was advanced enough to be published in three scholarly journals

— which as Biology professor Ragai Ibrahim says — is quite an accomplishment for an undergraduate student.

His doctoral research involves the study of some unusual plant chemicals and the enzymes involved in their biosynthesis. Some of these natural products need to be eliminated from plants because of their toxicity, whereas the presence of others may be related to the survival and environmental fitness of some plants. Novel techniques in plant biotechnology are now available to eliminate undesirable natural metabolites, or introduce new ones into plants for their protection against microbial attack.

Luc Varin at work in biology lab.

Varin is working with Professor Ibrahim on a genetic engineering project aimed at improving the quality of Canadian rapeseed (canola) by eliminating its toxic metabolite which renders the protein-rich seed meal unsuitable as livestock feed supplement. Along with two other researchers, Ibrahim has been awarded a prestigious NSERC grant in biotechnology. Ibrahim is quick to note that Varin's research work on these metabolites was instrumental in the success of being awarded the grant. Varin succeeded in isolating an enzyme involved in the synthesis of another innocuous metabolite and will soon clone its gene into canola with the aim of eliminating the toxic compound.

The publications emanated from the results of his research have brought him visibility both at home and abroad. He recently presented these results as a symposium speaker at an international conference. Next summer he will present his findings at a joint meeting of the American and Canadian Societies of Plant Physiology.

It may be significant that Luc Varin's success in battling the elements of nature in 1984 led to his keen curiosity and consequential expertise in harnessing the biological laws of nature today.

SPECIAL AFFINITY CREDIT CARD FOR CONCORDIA ALUMNI

Concordia University and the Bank of Montreal have reached an exciting new credit card arrangement. Under the agreement, negotiated by Concordia's three alumni associations, a special Bank of Montreal MasterCard, is being issued for Concordia alumni, faculty, staff, and graduating students. It's called an affinity card, the term used for a credit card associated with a special interest group such as an alumni association, a charity or a professional association. Not only do cardholders benefit from special extra features, the university also gains a new source of income. The beauty of the arrangement is that supporters of Concordia can, without changing their spending habits, earn vital income for Concordia. Every time the card is used to make a purchase, a contribution is made to Concordia by the Bank of Montreal.

For further information and/or application forms, contact: Sandra Curnew, Alumni Office, 2150 Bishop Street, Telephone: 848-3818.

Editorial Committee Chair: M. E. Szabo
Editor: D. MacFadden
Editorial Asst.: A-M. Laurin
Writers: B. Kornbluth, K. Potter
Photos: B. McNeil

typesetting: Paragraphiques Ltée
printing: Concordia Printing Services